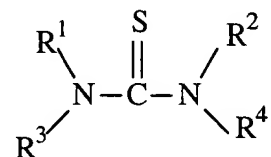


## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

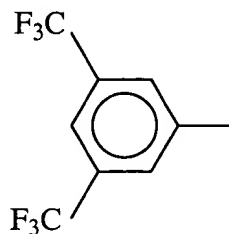
### LISTING OF CLAIMS:

1. (currently amended) A substituted thiourea having the general formula



~~characterised in that each of~~ wherein R<sup>1</sup> and R<sup>2</sup> ~~independently~~ comprises an alkyl, alkaryl or aryl group or a substituted derivative thereof, and contains at least one fluorine atom, R<sup>2</sup> is -CH<sub>2</sub>-CF<sub>2</sub>-CF<sub>2</sub>-CF<sub>3</sub>, and ~~in that~~ each of R<sup>3</sup> and R<sup>4</sup> is selected from the group ~~which consists~~ consisting of H, alkyl, alkaryl, and aryl, and substituted derivatives of H, alkyl, alkaryl or aryl, and thereof, including fluorine-containing derivatives.

2. (original): A thiourea according to Claim 1 wherein R<sup>1</sup> is



3. (canceled).

4. (canceled).

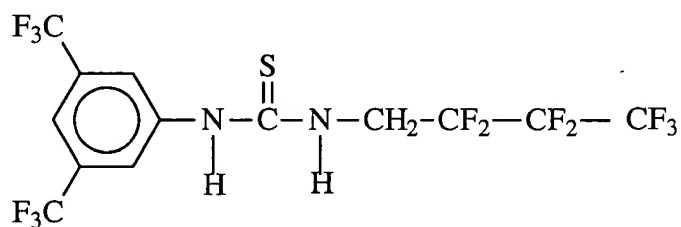
5. (canceled).

6. (canceled).

7. (original): A thiourea according to Claim 1 wherein  $R^3$  is H.

8. (original): A thiourea according to Claim 1 wherein  $R^4$  is H.

9. (currently amended) A thiourea according to Claim 2[[,]] ~~viz. one~~ wherein the substituted thiourea is of the formula



10. (canceled).

11. (canceled).

12. (canceled).

13. (currently amended) A method according to Claim ~~12~~ 19 wherein the noble metal is gold, platinum, silver, palladium or rhodium.

15. (currently amended) A method according to Claim ~~12~~ 19 wherein the treatment with substituted thiourea is performed in the presence of an oxidant.

16. (original): A method according to Claim 15 wherein the oxidant comprises ferric (Fe<sup>III</sup>) ions.

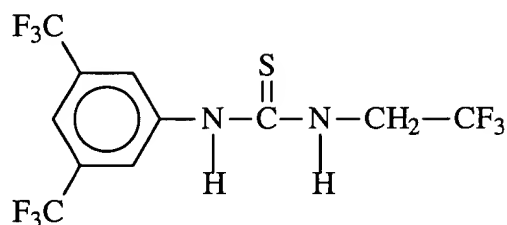
17. (currently amended) A method according to Claim ~~12~~ 19 wherein the treatment and extraction are carried out at room temperature and are followed by recrystallisation of the product from petroleum ether (~~100–200°~~) at a temperature in the range of 100°C to 120°C.

18. (canceled).

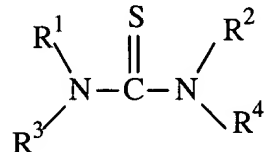
$$\begin{array}{c} \text{R}^1 \quad \text{S} \quad \text{R}^2 \\ \diagdown \quad \parallel \quad / \\ \text{N} - \text{C} - \text{N} \\ / \quad \quad \backslash \\ \text{R}^3 \quad \quad \text{R}^4 \end{array}$$

5

20. (new): A substituted thiourea having the general formula

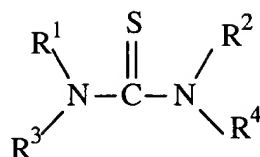


21. (new): Use of a substituted thiourea in the extraction of gold, platinum, silver, palladium or rhodium from a matrix comprising treating the matrix with the substituted thiourea, and subjecting the thus treated matrix to supercritical fluid extraction, the substituted thiourea having the general formula



wherein  $R^1$  and  $R^2$  independently comprise an alkyl, alkaryl or aryl group or a substituted derivative thereof, and contain at least one fluorine atom, and each of  $R^3$  and  $R^4$  is selected from the group consisting of H, alkyl, alkaryl, aryl, substituted derivatives of H, alkyl, alkaryl or aryl, and fluorine-containing derivatives.

22. (new): Use of a substituted thiourea in supercritical carbon dioxide in the solubilising and carrying of noble metals for deposition or impregnation thereof, the substituted thiourea having the general formula



7